## SPECIFICATIONS PURSUANT TO CT2.35# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES AND SUBDIVISION BOUNDARIES

Timber Designation Table A

		Timber Designation Table A
Unit/ Subdivision	Tree Paint Color	Designation or Specification
Sale Area	Blue	Hazard Tree. Notwithstanding BT2.32 all dead and unstable live trees (4" dbh and larger) which are leaning towards a road or are otherwise hazardous to a road, and are sufficiently tall to reach Purchaser's landings or the roadbed of National Forest System roads within Sale Area, shall be felled by Purchaser when marked in the specified paint color above and below stump height by Forest Service in advance of felling any other timber in the vicinity. Pieces meeting Utilization Standards from such dead and unstable live trees shall be removed unless Purchaser is notified in writing that removal would cause unacceptable damage to areas requiring special protection such as residual timber, roads, administrative sites, streamside management zones, and areas identified on Sale Area Map or on the ground. (For Designation by Description reference Special Provision CT2.353# - Designation by Damage Class)
Sale Area	Blue	<u>Individual Tree Mark</u> . Individual trees are designated for cutting if marked above and below stump height with the specified paint color.
N/A		Leave Tree Mark. All live < > are designated for cutting unless Marked as leave trees. Leave trees are Marked above and below stump height with the specified paint color. Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.
N/A		Wildlife Trees. Notwithstanding the designation for cutting under BT2.31, BT2.33, BT2.34, or BT2.35, trees which are identified by standard Forest Service metal wildlife tree sign or painted with the specified paint color on the uphill and downhill side, shall be left uncut. In event such trees are destroyed in Purchaser's Operations, Forest Service may designate alternate trees to be saved.
Sale Area	Pink, Brown, or Black	Marked Out Trees. When it is necessary to delete previously marked trees, an unique tree marking paint color will be marked over or adjacent to the original mark, but will not obscure the original marking. Trees marked with the original marking paint color and the unique tree marking paint color are not Included Timber.
N/A		Designation by Spacing CT2.351#
N/A		Designation by Species and Diameter, CT2.352#
Sale Area		Designation by Damage Class, CT2.353#
N/A		Designation by Row Spacing, CT2.354#

### Subdivision Boundary Designation Table A

Unit/ Subdivision	Tree Paint Color	Designation or Specification
Sale Area	Orange	Cutting unit boundaries (except along roads, private lines, & perennial streams) are designated with ORANGE tracer paint showing rectangular marks facing the adjacent boundary trees and into the unit.  Boundary lines are also flagged with white flagging (except along roads). Hazard tree unit 4 is designated with ORANGE tracer paint at the beginning and end of the road showing vertical lines down to the ground and a rectangular mark facing into the unit. All boundary trees are painted above DBH with at least one stump mark at ground level. Corners of units where boundaries intersect with access roads are painted with the unit number. Painted boundary trees are not designated for cutting.

CT5.31# - ROAD MAINTENANCE REQUIREMENTS. (7/01) Purchaser shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

### Contract Road Maintenance Requirements Summary Table

Dood	Termini		Termini		Miles	App	licable <b>Pre</b>	-haul Road	l Maintenan	ce Specific	ations
Roau	Road From	То	willes	T800	T801	T802	T803	T805	T807		
1S35	Big Creek Shaft Rd	E.O.P.	0.44	Р	Р	Р	Р	Р	Р		

Road	Tern	Termini Miles		App	licable <b>Duri</b> ı	<b>ng Haul</b> Ro	ad Maintena	ince Specific	cations
Noau	From	То	willes	T800	T801	T802	T803	T805	T806
1835	Big Creek Shaft Rd	E.O.P.	0.44	Р	Р	Р	Р	Р	Р

Dood	Tei	Termini		Applicable Post Haul Road Maintenance Specifications							
Road	From	То	Miles	T800	T801	T802	T803	T804	T805	T808	T809
1 <b>S</b> 35	Big Creek Shaft Rd	E.O.P.	0.44	Р	Р	Р	Р	Р	Р	Р	Р

E.O.P. = End of Project.
P = Purchaser Performance Item. D = Deposit to Forest Service. D3 = Deposit to Third Party

#### T-806 DUST ABATEMENT PLAN (CT5.31)

Road	Termini		Material	Application	Preparation
Number	From	То	${ m Type^1}$	$Rates^1$	Method T803
All Native or Aggregate Surface Roads			Water	As Needed to Abate Dust	T-803 As Needed

#### NOTES:

- 1. The number of water applications per day and the rate of application shall be as required to abate dust.
- 2. Where watering is designated, initial and subsequent applications are estimated at 0.5 GAL/SQ YD. A minimum of one complete watering per day is required for volumes up to 50 MBF. For volumes exceeding 50 MBF per day, additional water will be applied as needed to abate dust. Water draft sites on fish-bearing streams must have a minimum flow of 1.5 CU FT per second to allow water drafting.
- 3. Armor road approaches as necessary from the end of the approach nearest a stream for a minimum of 50 feet, or to the nearest drainage structure (e.g. waterbar or rolling dip) or point where drainage does not drain toward the stream
- 4. Check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering protected stream management zone. Water-drafting vehicles will contain petroleum spill kits. Dispose of absorbent pads according to Hazardous Response Plan.
- 5. Use a screened intake device and pumps with low entry velocity and suction strainers with screen less than 2mm (1/8 in) in size to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. The suction strainer shall be inserted close to the substrate in the deepest water available. Place strainer in a canvas bucket to avoid substrate and aquatic species disturbance when stream flow approaches 1.5 Cu.Ft. per sec. A drafting box measuring 2 feet on all sides covered in a maximum of 0.25 inch screening is required.
- 6. If portable pump is used for stream drafting, place pump in containment pan. Spill pads shall be used for fueling in stream management zone (smz). Fuel shall be stored outside of smz.
- 7. Avoid water sources in developed recreation sites while facilities are open to public use.
- 8 . Water drafting by more than one truck at a time at the same site is prohibited.
- 9. Water Source Drafting Flow Requirements

#### **Fish Bearing Streams:**

Do not exceed 350 gallons per minute for streamflow greater than or equal to 4.0 cubic feet per second (cfs); do not exceed 20% of surface flows below 4.0 cfs; and, cease drafting when bypass surface flow drops below 1.5 cfs.

#### **Non-Fish Bearing Streams:**

Do not exceed 350 gallons per minute for streamflow greater than or equal to 2.0 cfs; do not exceed 50% of surface flow; and, cease drafting when bypass surface flow drops below 10 gallons per minute. Water sources designed for permanent installation, such as piped diversions to off-site storage, are preferred over temporary, short-term-use developments. Locate water drafting sites to avoid adverse effects to in-stream flows and depletion of pool habitat.

	Fish Bearing Streams								
CFS	GPM	Drafting cannot exceed (GPM)	Time to fill 1000 Gal (Min)						
>4	>1800	350	3						
3.5	1575	315	3						
3	1350	270	4						
2.5	1125	225	4						
2	900	180	6						
1.5	675	135	7						
<1.5	<675	Cease D	Cease Drafting						

	Non-Fish Bearing Streams								
CFS	GPM	Drafting cannot exceed (GPM)	Time to fill 1000 Gal (Min)						
>2	>900	350	3						
1.5	675	338	3						
1	450	225	4						
0.9	405	203	5						
0.8	360	180	6						
0.7	315	158	6						
0.6	270	135	7						
0.5	225	113	9						
0.4	180	90	11						
0.3	135	68	15						
0.2	90	45	22						
0.1	45	23	44						
0.09	41	20	49						
0.08	36	18	56						
0.07	32	16	63						
0.06	27	14	74						
0.05	23	11	89						
0.04	18	9	111						
0.03	14	7	148						
0.0222	10	5	200						
< 0.0222	<10	Cease D	rafting						

# SPECIFICATIONS PURSUANT TO CT5.35# - REQUIREMENTS OF ROAD AND WATER SUPPLY USE TABLE A

Load Limitations	Purchaser shall notify Forest Service in writing of the planned size and load distribution for equipment which exceeds the State of California Vehicle Code legal size and weight, and the National Forest System roads to be used. Such notice may be part of plan of operation. Within 15 days after receipt of the written notice Forest Service shall notify Purchaser in writing of any regulations or restrictions that may be needed to protect National Forest Transportation Facilities.  A written permit shall be required for moving any vehicle which is in excess of the established legal size and weight which is not listed in the above plan, except as may be authorized in prior written agreements.							
Existing Non- National Forest System Roads		Roads not shown on Sale Area Map may be used as Temporary Roads if there is agreement before use is started.						
Snow Removal	If Purchaser removes snow from roads, such work shall be done with Forest Service approval and in a manner that will protect roads and adjacent resources.							
	Snow berms shall be removed or placed to avoid accumulation of melt water on the road and prevent water concentration on erosive slopes or soils.							
	snow depth m surface is material and prior to hau	ust be left damaged, Pu repair stru ling, unless	to protect trchaser shall ctures damage climatic cor	the roadway. ll replace ged in bladin nditions prev				
	Single lane roads shall be plowed full width including turnouts. In event double lane roads are not plowed to full width, warning signs shall be required and plowing shall be no less than single lane (12 feet) with intervisible turnouts.							
Water Sup Dep.	If Purchaser utilizes the water site located $\langle N/A \rangle$ , for any listed activity, Purchaser shall make deposit with Forest Service for that activity at the time and in the amount shown in the Water Supply Deposit Schedule table below.							
		WATER SU	PPLY DEPOSIT	SCHEDULE				
	Activity	Unit of Payment	Unit Cost	Total Cost	Time of Payment			

Surface
Replacement
Deposits

Page 34b

Purchaser shall make Required Deposits for deferred surface replacement (16 U.S.C. 537) for use of existing surfaced roads. If applicable, such deposits shall be based upon the volume and distance hauled on the roads and at the applicable rates listed in the table below titled Surface Replacement Deposit Schedule. If Purchaser uses surfaced roads under jurisdiction of Forest Service other than those listed, Forest Service may establish applicable rates for such surfaced roads.

#### SURFACE REPLACEMENT DEPOSIT SCHEDULE

Road No.	From	То	Miles	Rate
N/A				

### Specifications Pursuant to CT6.22# – Protection of Improvements, Table A.

<u>Improvement</u>	Owner's or Permittee's Name	<u>Timing</u>	Specifications	Work and Cost of Removal or Relocation Borne by
Rangeland Infrastructure (fences, gates, water developments, cattleguards)	Various	Prior to felling operations adjacent to infrastructure		Purchaser
Distribution Lines	Pacific Gas & Electric Company	Prior to felling operations adjacent to distribution lines		Purchaser

### SCHEDULE PURSUANT TO CT6.315# - SALE OPERATIONS SCHEDULE (8/2006), Table A

<u>Unit/Area</u>		Conditions of Operation	Purpose
CA-3	on Sale	No operations (with the exception of the	Avoid disturbance
Area	Map	hauling of products, road reconstruction and	to nesting spotted
		road maintenance) from March 1 to August 15	owls
Sale	Area	No operations (with the exception of loading,	Avoid disturbing
		hauling of products, and dust abatement)	occupants of
		within 1/4 mile of occupied residences from 7	permanent
		p.m. to 7 a.m. any day of the week	residences
Sale	Area	Included Timber must be removed from the Sale	Control of slash
		Area within:	breeding insect
		-Four weeks of felling from 3/01 to 6/30.	_
		-Six weeks of felling from 7/01 to 9/30.	
		-Eight weeks of felling from 10/01 to 12/31	

## SPECIFICATIONS AND TREATMENTS PURSUANT TO CT6.41# - FELLING, BUCKING AND LIMBING

### TABLE A

Treatment Method	Felling, Bucking and Limbing Specifications
Limbing	Outside of construction clearings, Clear-cutting Units and regeneration units, unless otherwise provided by BT6.414, Purchaser shall, prior to skidding/yarding operations, cut exposed limbs from products which are to be skidded/yarded. Such limbing of stems shall be done to a top diameter of approximately 8 inches at which point the top shall be cut from the remainder of the stem. (See Whole Tree Yarding Specifications Below).
No Lop	N/A
"No Lop"	
Whole Tree Yarding "Whole"	Notwithstanding the requirements above, within units or payment units designated "Whole" on Contract Area Map, trees smaller than 18 inches DBH shall be skidded/yarded to agreed landing locations prior to limbing, bucking, and lopping. Trees larger than or equal to 18 inches DBH shall be bucked into two or more pieces with the butt portion being no longer than 41 feet prior to skidding/yarding. The butt log shall be limbed prior to skidding/yarding.
Directional Felling "DF"	Within areas designated DF on Sale Area Map, Included Timber shall be directionally felled away from <a href="lava caps">lava caps</a> , meadows, hardwoods, fences, gates, cattle guards, distribution lines, survey monuments, controlled areas, reserve trees, sensitive plants, noxious weeds, streamcourses, <a href="NFS trails and other ownership">NFS trails and other ownership</a> with the use of specialized equipment. Such directional felling shall not be required when in the faller's judgment it is unsafe to do so, and shall be left standing.
Treatment of Stumps	Within areas shown on Sale Area Map, Purchaser shall treat stumps of <a href="N/a">n/a</a> equal to or greater than 14 inches stump diameter, (measured inside bark) unless otherwise agreed in writing. Treatment shall be with a borate compound registered by EPA in the State of California for prevention of annosus root disease.  Treatment shall consist of removal of sawdust and other loose debris from the cut surface of the stump and application of a thin layer of the borate compound uniformly over the entire cut surface, including exposed wood surfaces on the stump sides, at the rate specified on the product label. Any surface irregularities on the stump preventing application of a uniform layer of borate compound shall be cut level prior to treatment. Unless waived in writing, Purchaser shall also apply an approved colorant mixed with the borate compound to insure complete coverage. Treatment should be done as soon as possible but shall be completed no later than 6 hours after felling, otherwise stumps shall be re-cut and treated.

	Page 40b				
	Purchaser shall not apply borate compound during heavy rain fall or when such precipiation rate is predicted within $\underline{24}$ hours of application to cause borate compound to be flushed off the stump and become ineffective, in that case treatment shall be reapplied. Application shall be completed within $\underline{24}$ hours of the precipitation having ceased. Borate compound also shall not be applied to stumps located within $\underline{10}$ feet of live streamcourses and meadows/wetlands shown on Sale Area Map.				
	Purchaser shall provide the borate compound and colorant and apply it in compliance with the State of California laws and regulations pertaining to pesticides and pest control operations. Borate compound storage shall be located such that any spillage will not contaminate water. All spills shall be promptly cleaned up and spilled material disposed of according to the product label. All spills occuring in water or over 0.1 pounds shall be reported to Forest Service within 4 hours.  Purchaser shall submit at the end of each month a "Monthly Summary of Pesticide Use Reports" to the appropriate County Agricultural Commissioner with a copy to the District Ranger.				
Maximum Log Length	Cut trees shall be bucked prior to skidding so that resulting logs shall not exceed the maximum log length including trim allowance shown in following table:				
	Unit Number Maximum Log Length				
	See Whole Tree Yarding Specifications Above 41				
Minimum Stump Height	Payment Units	Units Minimum Stump Purpose or Reason Height (inches)		ose or Reason	
	Sale Area	1.0	Ace	countability	

### <u>Ground-Based Skidding Table - CT6.42#, Table A</u>

Map Symbol	Requirements
TRAC	Skid road pattern shall be agreed in advance of felling and main skid roads shall be flagged on the ground in advance of felling. Purchaser shall stage-log by felling and skidding Included Timber in two or more separate operations when necessary to prevent undue damage to the resources or residual stand. Needed tractor trails shall be constructed in advance of skidding.
	Products shall be end-lined as needed to protect resources or residual timber from unnecessary damage. The number of chokers shall be limited as necessary to avoid unnecessary damage to resources or residual timber. By agreement, tractors may be used to separate products to prevent stain.
SUSP	Products shall be skidded with leading end clear of ground.
SPACE Skid roads will average 132 feet from center to center, except where conve	
ENDL	Endlining shall not be required for distances in excess of <u>75</u> feet uphill, and <u>100</u> feet downhill.
MAX	Tractors used for skidding outside Clearcutting Units, regeneration units or other authorized clearings, shall be of the type (rubber-tired or track-laying) shown on the Sale Area Map and shall not exceed the overall width designated on Sale Area Map.
МН	Purchaser shall cut Included Timber and move it to designated skid trails using equipment with a boom having an operating radius of at least $\underline{20}$ feet for bunching trees, capable of severing, lowering and placing trees up to $\underline{24}$ inches diameter at stump height on the ground prior to skidding. Such equipment must be capable of operating on slopes up to $\underline{45}$ %.
	Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources from unnecessary damage.
adjacent to sensitive areas to protect resources from unnecessary damage.  Trees which exceed capability of specified equipment may be felled, bucke skidded in a manner consistent with the requirements of BT6.41 - Felling at Bucking, CT6.41# - Felling, Bucking, and Limbing Requirements and the a "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.	

### Specifications Pursuant to CT6.6# - Erosion Prevention and Control, Table A

<u>Vegetative Soil Stabilization</u>: Where soil has been disturbed by Purchaser's Operations and the establishment of vegetation is needed to minimize erosion, Purchaser shall take appropriate measures normally used to establish an adequate cover of grass or other vegetation acceptable to Forest Service or take other agreed stabilization measures. Forest Service shall designate on the ground such disturbed areas annually as logging and Temporary Road construction are completed.

Forest Service upon request shall provide advice as to soil preparation and the application of suitable seed mixtures, mulch and fertilizer and the timing of such work. In no event shall Purchaser be required to treat more acres than that shown in the legend of Sale Area Map.

Purchaser shall use the type of native seed mixtures, mulch, and fertilizer as listed below:

Seed Mix	Pounds/Acre	Type of Mulch	Fertilizer
N/A			

<u>Special Erosion Prevention Measures:</u> Purchaser shall give adequate treatment by spreading slash or wood chips or by agreement giving other treatment to portion of tractor roads, skid trails, landings, cable yarding corridors, tractor-end lined corridors and Temporary Road fills where necessary to supplement other erosion prevention measures required elsewhere in this contract. In no event shall Purchaser be required to treat more acres than that shown in the legend of Sale Area Map. The specific locations to be treated shall be designated on the ground by Forest Service. These special erosion prevention measures are to be done within the same date and time periods as stated above.

Soil Scarification: N/A.	
Backblading: N/A.	

<u>Tillage</u> In addition to meeting the requirements of BT6.64, unless otherwise agreed in writing, tillage shall be required on the areas listed in the following table.

Tillage shall be accomplished by equipment that will lift and fracture the soil by vertical and lateral shattering, leaving soil loosened through the full width and depth of the compacted layer with the topsoil remaining substantially in place rather than being inverted.

Tillage depth is shown in the following table. Agreement in writing may be made to a lesser depth if rocks or other limiting site conditions are encountered.

Tillage shall be limited to periods when soil dryness will result in crumbled soil, avoiding the formation of large clods. Purchaser and Forest Service shall agree in writing on the timing of completion of such work to coordinate with desirable soil moisture conditions.

Areas to Till	Tillage Depth (Inches)	Maximum Acres to Treat
Landings	24	4
Main Skid Road and Tractor Roads 1/	18	7
Temporary Roads $\underline{1}/$	24	2

 $<sup>\</sup>underline{1}/$  On slopes greater than 15% apply organic mulch cover (slash, weed-free straw mulch, masticated material, etc.) to waterbar outlets and to the skid trail/temporary road footprint if subsoiling alone may lead to erosion. Achieve 50-60% cover on skid trails when possible (if sufficient timber sale material is present).

### SPECIFICATIONS PURSUANT TO CT6.7# - SLASH TREATMENT (8/2006), Table A

Specified slash treatment methods shall be shown on Sale Area Map or listed in the following tables by the following symbols:

Slash Treatment Methods

Slash Treatment Methods				
Symbol	Method	<u>Definition</u>		
Chip (4/15/14)	tree boles meeting Non-Sawtimber product specificat			
Deck	"Decking" large material	Logging Slash $\underline{10}$ inches or larger in large end d.o.b. and longer than $\underline{10}$ feet or more in length shall be Decked for disposal by Forest Service by piling pieces parallel to each other.		
Mach	"Machine Piling"	Concentrations of Logging Slash, excluding scattered individual pieces, shall be Machine Piled by tractor equipped with brush rake for disposal by Forest Service.		
Pile	Pile "Piling"  small  material  Logging Slash smaller than 10 inches in large end and shorter than 10 feet long shall be hand Piled disposal by Forest Service.			
Stack	"Stacking" small material"	Logging Slash $\underline{8}$ inches or smaller in large end d.o.b. and $\underline{8}$ feet or more in length shall be stacked for disposal by Forest Service by piling pieces parallel to each other.		
shown on Sale Area Map and designated on t		Logging Slash shall be moved or hauled to locations shown on Sale Area Map and designated on the ground where it shall be piled for disposal by Forest Service.		
concentrations with slas  inches of the ground as  Slash shall be scattered without unnecessary dama scattered logs shall be and positioned so they w		Logging Slash shall be scattered to reduce slash concentrations with slash being generally left within 12 inches of the ground as shown on Sale Area Map. Logging Slash shall be scattered into openings away from and without unnecessary damage to residual trees. All scattered logs shall be limbed, placed away from trees and positioned so they will not roll. When Scattering is specified, another method may be used by agreement.		
Slash Treatment"  distance limitations (200 Feet) for v treatment. Within such units and the Logging Slash adjacent thereto, Loggi treated by Purchaser. Primary treatm Removing, Chipping, Piling, Machine F combination of these means unless a m or prohibited on Sale Area Map. Logg readily treated by the selected or sp		Designated on Sale Area Map are "View Areas" with distance limitations (200 Feet) for visible slash treatment. Within such units and the area of visible Logging Slash adjacent thereto, Logging Slash shall be treated by Purchaser. Primary treatment shall be by Removing, Chipping, Piling, Machine Piling, or a combination of these means unless a method is specified or prohibited on Sale Area Map. Logging Slash not readily treated by the selected or specified method shall be removed to designated areas or treated as agreed.		

### Big Creek Fire Salvage Reoffer

		Page 46b				
Cover	"Covering Piles"	All piles shall be covered with a durable waterproof covering as approved by Forest Service. The material shall be at least 6 feet in width. Piles shall not be less than fifty percent covered, with the covering extending not less than half way down all sides. Pieces of burnable material shall be placed on top of the durable waterproof covering to keep the covering from blowing off the pile.				
Fell	"Damaged Small Trees"	Unless treated under other provisions, all trees smaller than the minimum d.b.h. in A2, over 5 feet in height, and damaged beyond recovery by Purchaser's Operations shall be felled. Such trees shall be limbed to a stem diameter outside bark of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and shall be bucked into lengths not exceeding 20 feet.				
YUMD	"Yarding Unutilized Material- Decking"	All unutilized material developed by Purchaser's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized material shall be Yarded to landings and Decked. Where this is impractical, or other reasons, other locations shall be agreed upon.  Unit Large End Length d.o.b. (in) (feet) Sale Area				

PILING SPECIFICATIONS. All piles shall be reasonably compact and free of soil to facilitate burning and shall be constructed of such size and at such distance from trees so that burning shall not result in unnecessary damage to residual timber. Such Logging Slash shall be bucked into lengths not exceeding 10 feet prior to piling. Maximum width of tractor, with brush rake attached, shall not exceed n/a inches. Machine Piling is not required on areas where use of tractors would cause undue damage to residual timber or where slopes exceed 25 percent. Piles shall be located a distance of at least twice their height in feet from the outer edge of tree crowns or snags. Piles shall be no less than 4 feet in height or greater than 6 feet in height. Material extending three feet or more outside the edge of a pile shall be trimmed. An 8 foot fuelbreak shall be cleared of all but fine material around each Machine Pile and an 18 inch wide fireline shall be cleared to mineral soil around the outer ring of the fuelbreak. For hand piles, Purchaser shall construct a fireline cleared to mineral soil and at least 3 feet wide around each pile. In areas where there is a potential for burning material to roll, firelines, including those for Machine Piles, shall be trenched on the downhill side of each pile to adequately prevent material from crossing firelines. Trenches shall be constructed by hand unless otherwise agreed. In addition to trenching, material shall be piled perpendicular to the slope to prevent it from rolling.

UNIT NUMBER. SLASH TREATMENT SPECIFICATIONS.

	SLASH TREATMENT	
Cutting Unit No:	Specified Method	<u>Prohibited</u> <u>Method</u>
Sale Area	Scat 18", Fell	Mach

LANDINGS AND DISPOSAL SITES. Unutilized logs accumulated at landings and disposal sites shall be Decked by Purchaser for disposal by Forest Service. The maximum height of decks is shown in the following table. Other slash accumulated at landings and disposal sites shall be kept separate from unutilized logs and treated by the method shown in the following table.

		SLASH TREATMENT	
	Unit No.	Specified Method	Max. Ht. of
			Decks
		Mach, Pile, Stack,	
Landings	Sale Area	Deck, Cover	10

Page 46d

TREATMENT ALONG PERMANENT ROADS Permanent roads that require roadside slash treatment are listed in the attached table and shown on Sale Area Map. All Logging and Construction Slash within Required Disposal Strips shall be treated by Purchaser. "Required Disposal Strips" are those areas adjacent to permanent roads where slash treatment is required for resource objectives. The width of Required Disposal Strips is shown in the attached table and is measured in slope distance from Roadbed edges of permanent roads. By agreement, in Clearcutting Units and regeneration units slash from Required Disposal Strips may be treated with other Logging Slash. By agreement the location of Required Disposal Strips may be adjusted from side to side without materially changing the total work required.

Slash treatment in Required Disposal Strips shall be accomplished without affecting the proper functioning of channels leading to and from drainage structures.

Logging Slash larger than treatment size requirements of the specified method shall either be Scattered outside Required Disposal Strip, within Required Disposal Strip or Decked at agreed locations as shown in the attached table.

		SLASH TREATMENT		
Road No.	Unit No.	Width of Required Disposal Strip	Specified Method	Slash Larger Than Treatment Size Requirements of Specified Method
Forest Service Roads, County Roads, & Private Lines	Sale Area	50 feet	Mach or Pile	N/A
Hwy 120	2,3	100 feet	Mach or Pile	N/A

TREATMENT ALONG TEMPORARY ROADS. Outside of Clearcutting Units or regeneration units, all trees felled or pushed over and trees damaged beyond recovery by Temporary Road construction shall be felled, limbed to a stem d.o.b. of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and stem shall be bucked into lengths not exceeding 20 feet. Such slash shall be Scattered free of soil to reduce concentrations unless treatment is required by another specified method.

Page 46e

ADDITIONAL SLASH TREATMENT REQUIREMENTS. Within areas shown on Sale Area Map, Purchaser shall perform work according to the specifications in the attached Table, unless otherwise agreed in writing.

Table, antebb officiwibe	- 9 9 -
Subdivision, Payment Units, Roads and or Road Segments	Additional Slash Treatment Requirements
N/A	Yard all stem material to a top d.o.b. of $\frac{1}{2}$ inch, from timber designated for cutting, with the following exception: broken portions of logs and tops less than $\frac{4}{2}$ feet in length need not be yarded.
	Broken ends of merchantable logs shall not be bucked off in the units.
	Slash and Substandard Material accumulated at the landings shall be Decked or Machined Piled, in accordance with specifications above.
	Material accumulated at landings shall be considered as Timber Subject to Agreement under CT2.11#, described as Substandard Material and may be removed and paid for at Purchaser's option.

ASSISTANCE IN SLASH BURNING. If Forest Service requests, Purchaser shall furnish equipment and equipment operators to assist in preparation for slash burning at agreed times prior to the normal slash burning season in the area.

Purchaser shall furnish equipment and equipment operators for burning and mop-up when requested. The amount and kind of equipment requested shall be that normally used in slash treatment work and reasonably available under the existing equipment organization of Purchaser. Forest Service shall reimburse Purchaser for such work at rates common in the area or at previously agreed rates.

Tree Volume (based on original cruise tree data) (Volume in Cubic Feet - CF)

### CT6.8-2# - Measuring Option 2

### Table A

DBH	<u>IC</u>	<u>PP</u>	<u>SP</u>
12		15.89	
13		19.93	
14		24.58	
15	7.43	29.89	
16	15.82	35.88	
17	24.09	42.60	
18	32.22	50.09	
19	40.22	58.38	
20	48.09	67.50	
21	55.82	77.50	
22	63.42	88.42	90.25
23	70.89	100.28	95.87
24	78.23	113.12	102.67

### CT7.2# - Specific Equipment Requirements and Fire Precautionary Measures, Table A

### Equipment

A. Fire Tools and Purchaser shall meet applicable parts of Section 4428 of the CPRC.

> Unless agreed otherwise, Fire tools kept at each Active Landing shall be sufficient to equip all employees in the felling, yarding, loading, chipping, and material processing operations associated with each landing. Fire equipment shall include two tractor headlights for each tractor dozer used in Purchaser's Operations. Tractor headlights shall be attachable to each tractor and served by an adequate power source. Fire tools shall be kept in a sealed fire tool box adjacent to the Active Landing and readily accessible in event of fire.

> Where cable yarding is used, Purchaser shall provide a size 0 or larger shovel with an overall length of not less than 46 inches and a serviceable 5 gallon backpack pump filled with water or a fire extinguisher bearing a label showing at least a 4-A rating must be within 25 feet of each tail and corner block.

> Trucks, tractors/skidders, pickups and other similar mobile equipment shall be equipped with and carry at all times a size O or larger shovel with an overall length of not less than 46 inches and a 2-1/2 pound axe or larger with an overall length of not less than 28 inches.

> All required fire tools shall be maintained in suitable and serviceable condition for fire fighting purposes.

### B. Fire Extinguishers

Purchaser shall equip each internal combustion yarder, fuel truck, and loader with a (4-A:60-B:C) fire extinguisher for oil and grease fires.

Skidders and tractors shall be equipped with a minimum 5-BC fire extinguisher.

Fire extinguishers shall be mounted, readily accessible, properly maintained and fully charged.

Purchaser shall equip all mechanized harvesting machines and log processors with hydraulic systems, powered by an internal combustion engine (e.g. masticator, chipper, feller/buncher, harvester, forwarder, Hot Saw, stroke delimber, etc), with at least two 4-A:60-B:C fire extinguishers or an acceptable CAFS substitute identified in Section K.

### C. Spark Arresters and Mufflers

Except for tractors and other equipment with exhaust-operated turbochargers, Purchaser shall equip each operating tractor and any other internal combustion engine with an approved spark arrester. There shall be no exhaust bypass on any system.

Spark Arresters shall be a model tested and approved under Forest Service Standard 5100-la as shown in the National Wildfire Coordinating Group Spark Arrester Guide, Volumes 1 and 2, and shall be properly mounted and maintained according to manufacturer's specifications.

Every motor vehicle subject to registration shall at all times be equipped with an adequate exhaust system meeting the requirements of the California Vehicle Code.

#### D. Power Saws

Each power saw shall be equipped with a spark arrester approved and maintained in effective working order as identified in the Spark Arrestor Guide in Section C. above and according to applicable parts of CPRC Section 4442 or 4443. An Underwriters Labortories (UL) approved fire extinguisher containing a minimum 14 ounces of fire retardant shall be kept with each operating saw.

A size 0 or larger shovel with an overall length of not less than 38 inches shall be kept with each gas can, but not more than 300 feet from each power saw when used off cleared landing areas.

### E. Fire Patrolperson

Purchaser shall designate in the fire plan required by  ${\tt BT7.1}$ Supervisor & Fire and furnish on Sale Area during operating hours a fire supervisor, named in writing and authorized to act on behalf of Purchaser in fire prevention and suppression matters.

> Unless agreed otherwise, Purchaser shall furnish and designate in writing, a Fire Patrolperson each operating day when Project Activity Level C or higher is in effect. When on duty, the Fire Patrolperson is required to patrol the operation for the prevention and detection of fires, to take suppression action where necessary and to notify Forest Service as required under Sections I. Reporting Fires and L. Communications. This Fire Patrol is required on foot, unless otherwise agreed.

> By written agreement, one Fire Patrolperson may provide patrol on this and adjacent projects or sales. No Fire Patrolperson shall be required on Specified Road construction jobs except during clearing operations unless otherwise specified.

### F. Seasonal Permits

Purchaser shall obtain written permits from Forest Service before allowing welding, warming fires or burning, subject to CT7.22# - Emergency Precautions.

### G. <u>Clearing of</u> Fuels

Purchaser shall clear away, and keep clear, fuels and logging

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	10 feet slope radius
Tail or corner haulback blocks:	All running blocks on a cable yarding operation shall be located in the center of an area that is cleared to mineral soil at least 15 feet in diameter.
Lines near, between or above blocks:	Sufficient clearing to prevent line from rubbing on snags, down logs and other dead woody material.

debris as follows:

#### H. Smoking

All smoking shall be confined within a car, truck, crew rig or other enclosed cab after 1:00 PM on Ev days and all hours on E days (CT7.22#). At other times, any smoking shall be done while sitting in an area at least 3 feet in diameter, cleared of flammable materials. Burning tobacco and matches shall be extinguished before they are properly disposed.

### I. <u>Reporting</u> Fires

As soon as feasible, but no later than  $\underline{15}$  minutes after discovery, Purchaser shall notify Forest Service of any fires on Sale Area or along roads used by Purchaser.

### J. Tank Truck

Purchaser shall provide a water tank truck or trailer on or in proximity to Sale Area during Purchaser's Operations hereunder during Fire Precautionary Period unless otherwise agreed.

Tank truck or trailer shall contain at least 300 gallons of water and comply with the following requirements:

(1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Sale Area by Forest Service using a 5/16 inch orifice with a one inch in line test kit and shall meet or exceed the pressure values identified in the following table for nearest temperature and elevation:

T e m p	Sea Lev 1		100 Fee	-	200 Fee	-	300 Fee	-	400 Fee	-	500 Fee	-	600 Fee	-	700 Fee	-	800 Fee	-	900 Fee	-	1000 Fee	
55	179	23	174	23	169	23	165	22	161	22	157	22	153	22	150	21	146	21	142	21	139	21
70	175	23	171	23	166	22	162	22	158	22	154	22	150	21	147	21	143	21	139	21	136	20
85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20
<u> </u>	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G	Р	G
	S	P	S	P	S	Р	S	Р	S	Р	S	Р	S	P	S	Р	S	P	S	P	S	P
	Ι	M	Ι	М	I	М	I	М	I	М	I	М	I	М	Ι	M	I	M	I	M	Ι	М

The pump outlet shall be equipped with 1-1/2 inch National Standard Fire Hose thread. A bypass or pressure relief valve shall be provided for other than centrifugal pumps.

- (2) 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with no segments longer than 50 feet, when measured to the extreme ends of the couplings. Hose shall have reusable compression wedge type 1-inch brass or lightweight couplings (aluminum or plastic). One end of hose shall be equipped with a coupling female section and the other end with a coupling male section. The hose shall, with the nozzle closed, be capable of withstanding 200 PSI pump pressure without leaking, distortions, slipping of couplings, or other failures.
- (3) A shut-off combination nozzle that meets the following minimum performance standards when measured at 100 P.S.I. at the nozzle:

	G.P.M.	Horizontal
		Range
Straight	10	38 feet
Stream		
Fog Spray	6 - 20	N/A

- (4) Sufficient fuel to run pump at least 2 hours and necessary service accessories to facilitate efficient operation of the pump.
- (5) When Purchaser is using Hot Saws or Masticators an additional 250 feet of light weight hose, approved by Forest Service, shall be immediately available for use and be capable of connecting to the 300 feet of hose and appurturances in (2) and (3) above.
- (6) This equipment and accessories shall be deliverable to a fire in the area of operations and is subject to the requirements for each specific activity level identified in CT7.22#.

### Foam System (CAFS)

K. Compressed Air A fire suppression system where compressed air is added to water and a foaming agent. By agreement, Purchaser may substitute a CAFS or functional equivalent in lieu of the tank truck, trailer or fire extinguishers, provided it meets or exceeds the following specifications and requirements:

- 1. Variable foam expansion ratio 10:1 to 20:1.
- 2. Units shall be kept fully charged with air; water and foam concentrate as recommended by the manufacturer and have the appropriate tools to service the system.
- 3. The unit shall contain enough energy to empty tank and clear hose prior to exhausting propellent.
- 4. The unit shall be capable of being completely recharged within 10 minutes.
- 5. When used on cable yarding landings, the unit shall be outfitted for immediate attachment to carriage and transported without damage to the unit.

Fire extinguishers required for Hot Saws, Masticators and similar equipment identified in Section B. above may be substituted with a 3 gallon CAFS.

Tank truck, trailer or equivalent may be substituted with a 30 Gallon CAFS with at least 550 feet of one inch hose and an adjustable nozzle with enough water, air and foam concentrate for at least one recharge.

This equipment and accessories shall also be deliverable to a fire in the area of operations and subject to the requirements for each specific activity level identified in CT7.22#.

L. Communications Purchaser shall furnish a serviceable communications system such as a telephone, radio-telephone, radio system or satellite phone connecting each operating side within the Sale Area with Purchaser's headquarters, and capable of notifying Forest Service within 15 minutes of discovery of any fires on the Sale Area or along Purchaser's haul route. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service may agree to a reasonable alternative notification method.

A Citizen's Band (CB) radio is not acceptable communications.

#### M. Cable Yarding Tank Unit

When all or part of Included Timber will be harvested by a long span (over 1,500 feet) cable yarding operation, Purchaser shall provide at each active cable yarding landing a tank truck, trailer or acceptable CAFS substitute which can be lifted and transported by the carriage.

The unit shall meet the same requirements as specified for the tank truck, trailer or approved CAFS substitute.

N. <u>Helicopter</u> <u>Yarding Fire</u> Precautions Purchaser shall provide and maintain fire equipment as follows:

- 1. The fire tool box required under this provision shall be equipped for attachment to the helicopter long line so that it may be hauled to needed locations. Such attachment device shall not interfere with access to fire tools. Unless agreed otherwise, the fire tool box shall be located at the Active Landing ready for immediate dispatch.
- 2. An external helibucket readily attachable to the helicopter, with a capacity of at least 500 gallons, and having a remote control door mechanism adequate for rapid dropping of water. The helibucket shall be located at the helicopter service landing and shall be filled with water ready for immediate dispatch unless otherwise agreed.
- 3. All aircraft used in conjunction with Purchaser's Operations shall be equipped with an operable radio system capable of meeting Region Five avionics requirements.
- 4. For protection of fuel servicing operations, fire extinguishers which have the following ratings based on the open hose discharge capacity, i.e., "broken hose," of the aircraft fueling system shall be readily available:
  - a. Where said capacity does not exceed 200 gallons per minute, at least one approved extinguisher having a minimum rating of 20-B;
  - b. Where said capacity is in excess of 200 gallons per minute, but not over 350 gallons per minute, one approved extinguisher having a minimum rating of 80-B;
  - c. Where said capacity is in excess of 350 gallons per minute, two approved extinguishers, each having a minimum rating of 80-B.
- 5. By agreement, a suitable CAFS may also be used in lieu of the above extinguishers.
- 6. Extinguishers of over 50 pounds gross weight shall be of wheeled type or be mounted on carts to provide mobility and ease of handling.

### PROJECT ACTIVITY LEVEL (PAL) - CT7.22# - EMERGENCY PRECAUTIONS

### PROJECT ACTIVITY LEVEL TABLE

Level	Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.
A	Minimum required by CT7.2#.
В	1. Tank truck, trailer, or approved CAFS substitute shall be on or adjacent to the Active Landing.
С	<ol> <li>When Hot Saws or Masticators are operating, a tank truck, trailer or approved CAFS substitute shall be within 4 mile of these operations. Effective communications shall exist between the operator and the Active Landing.</li> <li>Immediately after Mechanical Operations cease, Fire Patrol is required for two hours.</li> </ol>
D	<ol> <li>Immediately after Hot Saw or Masticator operations cease, Fire patrol is required for three hours.</li> <li>No Dead Tree felling after 1:00 PM, except recently dead.</li> <li>No Welding or cutting of metal after 1:00 PM, except by special permit.</li> </ol>
Ev	<ol> <li>The following activities may operate all day:         <ul> <li>a) Loading and hauling logs decked at approved landings.</li> <li>b) Loading and hauling chips stockpiled at approved landings.</li> <li>c) Servicing equipment at approved sites.</li> <li>d) Dust abatement, road maintenance (Chainsaw use prohibited), culvert installation within cleared area, chip sealing, paving, earth moving or rock aggregate stock pile loading and installation (does not include pit or quarry development).</li> <li>e) Chainsaw and log processing operations associated with loading logs or other forest products at approved landings.</li> </ul> </li> <li>Hot Saws or Masticators may operate until 1:00 PM; provided that:         <ul> <li>a) A tractor or other equipment with a blade capable of constructing fireline is on or adjacent to the active landing or within ¼ mile of the operating equipment. This piece of equipment shall have effective communication with the Hot Saw or Masticator.</li> <li>b) Any additional restrictions specified by the Forest.</li> </ul> </li> <li>3. All other conventional Mechanical Operations are permitted until 1:00 PM.</li> </ol>

Page 53b

- 4. Some operations may be permitted after 1:00 PM, on a case-by-case basis, under the terms of a PAL Ev Variance Agreement. Activities for which a Variance may be issued are:
  - Rubber Tire Skidding
  - Chipping on Landings
  - Helicopter Yarding
  - Fire Salvage

When approved by a Line Officer, a Variance Agreement can be implemented when the criteria specified in the agreement are met and mitigation measures are in place. This approval is good for ten (10) days unless cancelled sooner or extended by the Contracting Officer for an additional ten (10) days. Variance approval can be withdrawn at the sole discretion of Forest Service. Variance approval is contingent on the 7-day fire weather forecast, fuel conditions, site characteristics, current fire situation, state of Purchaser's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).

- E The following activities may operate all day:
  - 1. Loading and hauling logs decked at approved landings.
  - 2. Loading and hauling chips stockpiled at approved landings.
  - 3. Servicing Equipment at approved sites.
  - 4. Dust abatement, road maintenance (chainsaw use prohibited) or loading stock piles and rock aggregate installation (does not include pit or quarry development).
  - 5. Chainsaw operation associated with loading at approved landings.

All other activities are prohibited.

**Project Activity Level Climatology** 

Station/SIG/Uni	Mt E	lizabeth (	High			2003-	
t	t		h)		Years Analyzed		2014
	Α	В	С	D	Ev	Е	Days
							Analyze
Month	Expe	ected	days per n	nonth at e	xpected PAL Value		d
June	2	5	13	6	4	0	360
July	0	1	11	11	9	0	372
August	0	0	5	12	12	2	372
September	0	2	7	8	10	3	360
October	3	8	10	4	5	0	372
							1836

### SPECIFICATIONS PURSUANT TO CT7.22# - EMERGENCY PRECAUTIONS. (10/2010)

### Region 5 Project Activity Level (PAL) Ev Variance Application/Agreement

Project Name:							
Contract Number:							
Purchaser/Contractor Name:							
Request #, for period:							
Units/Subdivisions Affected:							
Location of operation:							
Slope							
Aspect							
Elevation							
Fuels on site							
Fuels in surrounding area							
7 Day PAL Outlook							
Short range predictions (Red							
Flags)							
Fuel Moistures							
Response time of suppression resources							
Potential for ignition							
RAWS location							
Current Fire Situation:							
Draw down information							
National Readiness Level							
Contractual considerations:							
Normal Operating Season							
Frequency of recent contract fires							
in area							
Type of operation  Purchaser/Contractors past/current							
performance & equipment readiness							
Other site specific mitigation or							
precaution (i.e.							
Purchaser/Contractors proposals)							
Social & Community Considerations:							
Proximity of high value resources							
Sensitivity of location							
Remarks:							

Ev Proposed Actions	
Rubber Tired Skidding	
Chipping on Landings	
Helicopter Yarding	
Fire Salvage	
Description of Mitigation Measures	
Fire Management Officer Concurrence	Date
Line Officer Approval	Date
measures or actions must be implement Activity Level Ev. Unless extended,	and determined the specified mitigation ted to continue operations in Project the approval remains in effect for ten (10) r or extended by the Forest Service for an
additional ten (10) days. At the sol variance can be modified and/or cance	le discretion of the Forest Service, this elled at no cost to the government.
	- <b>J</b>
Contracting Officer	Date
Purchaser/Contractor Rep.	Date